

इंटरनेट

मानक

### Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 4673 (1968): Wick Feed Lubricators [PGD 19: Lubricating Equipments]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



BLANK PAGE



IS : 4673 - 1968

*Indian Standard*  
**SPECIFICATION FOR  
WICK FEED LUBRICATORS**

( First Reprint DECEMBER 1978 )

UDC 621.725.7



© Copyright 1968

**INDIAN STANDARDS INSTITUTION**  
**MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG**  
**NEW DELHI 110002**

*July 1968*

# *Indian Standard*

## SPECIFICATION FOR WICK FEED LUBRICATORS

---

Lubricating Equipment Sectional Committee, EDC 63

*Chairman*  
SHRI R. C. TANDON

*Representing*  
Railway Board ( Ministry of Railways )

*Members*

MAJ I. J. S. BASSI	Ministry of Defence ( DGI )
MAJ M. R. SATCHIDANANDHAM	( <i>Alternate</i> )
SHRI A. K. CHATTERJEE	Heavy Electricals ( India ) Bhopal
SHRI A. K. DASGUPTA	Heavy Engineering Corporation Limited, Durgapur
SHRI A. DONALD	Tecalemit ( Hind ) Limited, Calcutta
SHRI S. K. DEY ( <i>Alternate</i> )	
SHRI P. K. GOEL	Indian Institute of Petroleum ( CSIR ), Dehra Dun
SHRI B. D. GUJRATI ( <i>Alternate</i> )	
SHRI GURMIT SINGH	Fritz and Singh Private Limited, Calcutta
SHRI J. P. BANERJEE ( <i>Alternate</i> )	
SHRI S. KRISHNAN	Directorate General of Supplies & Disposals
SHRI R. K. MUKHERJEE	Central Mechanical Engineering Research Institute ( CSIR ), Durgapur
SHRI L. A. CHATELIER ( <i>Alternate</i> )	
SHRI R. RAMAKRISHNAN	Ashok Leyland Limited, Madras
SHRI B. K. SEN	The Fertilizer Corporation of India Ltd, Sindri
SHRI B. R. SINGH	Hindustan Steel Limited, Ranchi
SHRI SUBIMAL GHOSH ( <i>Alternate</i> )	
SHRI M. V. PATANKAR, Director ( Mech Engg )	Director General, ISI ( <i>Ex-officio Member</i> )

*Secretary*  
SHRI B. L. RAINA  
Assistant Director ( Mech Engg ), ISI

Panel for Oil Cans, EDC 63 : P3

*Convener*  
SHRI S. P. TRIPATHI

Chief Inspectorate of General Stores ( Ministry of  
Defence ), Kanpur

*Member*  
SHRI M. L. DHUPAR ( *Alternate* to  
Shri S. P. Tripathi )

---

**INDIAN STANDARDS INSTITUTION**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

# *Indian Standard*

## SPECIFICATION FOR WICK FEED LUBRICATORS

### 0. FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 31 May 1968, after the draft finalized by the Lubricating Equipment Sectional Committee had been approved by the Mechanical Engineering Divisional Council.

**0.2** Wick feed lubricators are devices provided with means of giving a reasonably continuous supply of oil to the bearings. The oil supply mechanism consists of a wick through which, by a siphon-like capillary action, oil drips into the bearing. The wicks, which are made of loose strands of wool worsted, are usually threaded through a loop at the end of a wire to facilitate their insertion in the tube. Feed is normally regulated by varying the number of strands in the wick.

**0.3** While preparing this standard assistance has been derived from Drawing No. RD/S/6 'Oil cups' issued by Central Mechanical Engineering Research Institute (CSIR), Durgapur.

**0.4** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified values in this standard.

---

### 1. SCOPE

**1.1** This standard specifies the requirements for two types of wick feed lubricators for general use.

### 2. MATERIAL

**2.1** Wick feed lubricators shall be manufactured from steel, aluminium or brass conforming to relevant Indian Standards.

**2.1.1** Wick feed lubricators of nominal capacities 5 to 160 cm<sup>3</sup> shall not be normally manufactured from brass.

---

\*Rules for rounding off numerical values (*revised*).

### **3. DIMENSIONS**

**3.1** The main dimensions of the wick feed lubricators shall be as given in Table 1.

### **4. CONSTRUCTION**

**4.1** The cap shall be pressed tight on the body and shall not slip off when lubricator assembly is dropped from 500 mm height on side.

**4.2** The outer periphery of the cap shall be knurled or serrated.

**4.3** The caps for wick feed lubricator of Type B shall be provided with two saw cuts 1 mm wide and 8 to 12 mm apart and slightly bent inwards.

**4.3.1** The caps for wick feed lubricator of Type A may also be provided with saw cuts as for caps for Type B.

**4.4** The wick feed lubricators shall generally be provided with wick holders which are employed for withdrawing the wick when the machine is not in running condition.

**4.5** The wick feed lubricator shall be free from any defects, such as cracks, flaws and burrs.

**4.6** The outer portion of wick feed lubricator shall be painted with oil and acid resistant red paint.

### **5. DESIGNATION**

**5.1** The wick feed lubricator shall be designated by:

- a) commonly used name;
- b) type of threads (*P* for pipe threads, *M* for Metric screw threads);
- c) nominal size; and
- d) IS number.

*Example 1:*

A wick feed lubricator having pipe threads and of nominal capacity 10 cm<sup>3</sup> shall be designated as:

Wick Feed Lubricator P 10, IS: 4673.

*Example 2:*

A wick feed lubricator having metric threads and of nominal capacity 2.5 cm<sup>3</sup> shall be designated as:

Wick Feed Lubricator M 2.5, IS: 4673.

**IS:4673-1968**

## **6. MARKING**

**6.1** The wick feed lubricators may be marked with the manufacturer's name or trade-mark, the nominal capacity and the type.

**6.1.1** The wick feed lubricators may also be marked with the ISI Certification Mark.

**NOTE** — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution ( Certification Marks ) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

## **7. PACKING**

**7.1** The wick feed lubricators shall be packed in accordance with the best prevalent trade practice or as specified by the purchaser.

## **8. SAMPLING**

**8.1** Unless otherwise agreed to between the buyer and the supplier the sampling plan as given in Appendix A shall be followed. For further information reference may be made to IS:2500 (Part I)-1963\*.

## **9. TEST**

**9.1** The wick feed lubricators shall be filled with oil and a pressure of 1 kgf/cm<sup>2</sup> shall be exerted. There shall be no leakage of oil at any point.

# **A P P E N D I X    A**

*( Clause 8.1 )*

## **A-1. SCALE OF SAMPLING AND CRITERIA FOR CONFORMITY**

**A-1.1 Lot** — In any consignment all the wick feed lubricators of the same size and manufactured from the same material under essentially similar conditions of production shall be grouped together to constitute a lot.

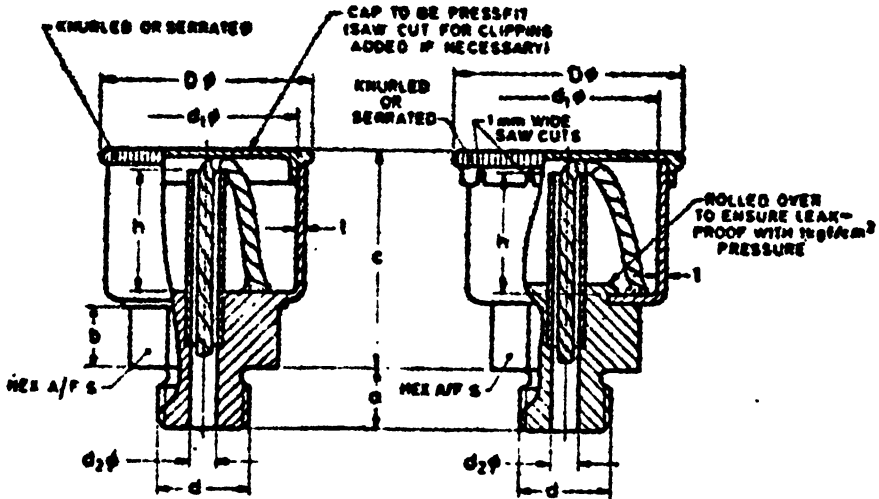
\*Sampling inspection tables: Part I Inspection by attributes and by count of defect.  
( Since revised ).



TABLE 3: DIMENSIONS FOR WICK FEED LUBRICATORS

(Class 3.1)

All dimensions in millimetres.



TYPE A

TYPE B

NOMINAL CAPACITY cm <sup>3</sup>	a	b	c	D	i	d		d <sub>1</sub>	d <sub>2</sub>	h	s
						†Pipe Thread	Metric Screw Thread			App- rox	(Width A/F)
1	8	8	20	21	1.2	FP ½	M10 × 1	14	3.5	7	13 <sup>+0</sup> <sub>-0.4</sub>
2.5	8	8	29	24	1.2	FP ½	M10 × 1	17	3.5	14	13 <sup>+0</sup> <sub>-0.4</sub>
5	8	8	29	31	1.5	FP ½	M12 × 1	24	3.5	14	17 <sup>+0</sup> <sub>-0.4</sub>
10	10	10	40	35	1.5	FP ½	M12 × 1	28	4.5	22	17 <sup>+0</sup> <sub>-0.4</sub>
20	10	10	44	42	1.5	FP ½	M12 × 1	35	4.5	25	17 <sup>+0</sup> <sub>-0.4</sub>
40	10	10	54	49	1.8	FP ½	M12 × 1	40	4.5	35	17 <sup>+0</sup> <sub>-0.4</sub>
60	10	10	60	54	1.8	FP ½	M12 × 1	45	4.5	40	17 <sup>+0</sup> <sub>-0.4</sub>
100	12	12	67	65	1.8	FP ½	M16 × 1	55	5.0	45	19 <sup>+0</sup> <sub>-0.6</sub>
160	12	12	78	73	1.8	FP ½	M16 × 1	62	5.0	56	19 <sup>+0</sup> <sub>-0.6</sub>

\*Pipe threads shall be preferred.

†According to IS: 2643-1964. Dimensions for pipe threads for fastening purposes. (Since revised).

**A-1.2** For ascertaining the conformity of the lot to the requirements of the standard, sample shall be selected and tested separately for each lot. The number of lubricators to be selected at random for this purpose shall be in accordance with col 1 and 2 of Table 2.

---

**TABLE 2 SAMPLE SIZE AND CRITERIA FOR CONFORMITY**

(Classs A-1.2 and A-1.4)

NUMBER OF LUBRICATORS IN THE LOT $N$	NUMBER OF LUBRICATORS TO BE SELECTED IN THE SAMPLE $n$	PERMISSIBLE NUMBER OF DEFECTIVES
(1)	(2)	(3)
Up to 100	8	0
101 .. 150	13	0
151 .. 300	20	0
301 .. 500	32	1
501 .. 1 000	50	2
1 001 .. 3 000	80	3
3 001 and above	125	5

---

**A-1.3** The lubricators for the sample shall be selected at random from the lot and in order to ensure the randomness of selection random number table shall be used. In case such table are not available, the following procedure for selection may be adopted:

Starting from any lubricator in the lot count them in one order as 1, 2, 3 ..... up to  $r$  and so on, where  $r$  is the integral part of  $N/n$  ( $N$  being the lot size and  $n$  the sample size). Every  $r$ th lubricator thus counted shall be selected to constitute the sample.

**A-1.4 Number of Tests and Criteria for Conformity**—The lubricators selected in accordance with A-1.2 and A-1.3 shall be examined for dimensions (*see* 3), construction (*see* 4) and tested in accordance with 9.1. The lot shall be considered as having satisfied the requirements of this specification, if the number of lubricators failing to meet the requirements of any one or more of the characteristics is less than or equal to the permissible number of defectives given in col 3 of Table 2.

# INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

## Base Units

Quantity	Unit	Symbol
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

## Supplementary Units

Quantity	Unit	Symbol
Plane angle	radian	rad
Solid angle	steradian	sr

## Derived Units

Quantity	Unit	Symbol	Conversion
Force	newton	N	1 N = 0.101 972 kgf
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m <sup>2</sup>
Frequency	hertz	Hz	1 Hz = 1 c/s (s <sup>-1</sup> )
Electric conductance	siemens	S	1 S = 1 A/V
Pressure, stress	pascal	Pa	1 Pa = 1 N/m <sup>2</sup>

## INDIAN STANDARDS INSTITUTION

Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002

Telephone : 27 01 31 (20 lines)

Telegrams : Manakasthan

### Regional Offices:

Western : Novelty Chambers, Grant Road  
 Eastern : 5 Chowringhee Approach  
 Southern : C.I.T. Campus, Adyar

**Telephone**  
 BOMBAY 400007 37 97 29  
 CALCUTTA 700072 23-08 08  
 MADRAS 600029 41 24 42

### Branch Offices:

'Pushpak', Nurmohamed Shalkh Marg, Khanpur	AHMADABAD 380001	2 03 91
'F' Block, Unity Bldg, Narasimharaja Square	BANGALORE 560002	2 76 40
R-26 Guru Teg Bahadur Complex	BHOPAL 462003	0 27 16
Showhouse Bldg, Sachivalaya Marg	BHUBANESHWAR 751001	5 36 27
Ahimsa Bldg, SCO 82-83, Sector 17C	CHANDIGARH 160017	2 53 20
5-8-56/57 L. N. Gupta Marg	HYDERABAD 500001	22 10 83
D-227 Todarmal Marg, Banipark	JAIPUR 302006	5 58 32
117/418 B Sarvodaya Nagar	KANPUR 208006	82 72
B.C.I. Bldg (3rd Floor), Gandhi Maidan East	PATNA 800004	5 36 55
Hantex Bldg (2nd Floor), Rly Station Road	TRIVANDRUM 695001	22 27

Reproduced by Reprography Unit, ISI, New Delhi

**AMENDMENT NO. 1    APRIL 1981**

**TO**

**IS:4673-1968    SPECIFICATION FOR WICK FEED LUBRICATORS**

**Alterations**

*(Page 4, clause 8.1) - Substitute 'IS:2500(Part I)-1973'* for *'IS:2500(Part I)-1963'*.

*(Page 4, foot-note with '\*' mark) - Substitute the following for the existing foot-note:*

*'\*Sampling inspection tables: Part I Inspection by attributes and by count of defect(first revision)*

*(Page 5, Table 1, foot-note with '+' mark) - Substitute the following for the existing foot-note:*

*'†According to IS:2643-1975 Dimensions for pipe threads for fastening purposes (first revision).'*

**(EDC 63)**